

REMARKS

This is in response to the Office Action mailed on April 17, 2003 in regard to the above-identified patent application. Claims 1,17-21, 29, 33, 40, 46, and 48 have been amended to more clearly describe Applicant's invention. Claims 1-52 are pending in the present case.

The period for response to the Office Action mailed ended on July 17, 2003. Please find filed herewith a petition for a three month extension of time. The period for response with the three month extension ends on October 17, 2003.

If for any reason the petition should become separated from this response, the Commissioner is respectfully requested to consider this a petition for any extension of time required to maintain the pendency of this patent application. In this event the Commissioner is also authorized to charge Deposit Account No. 50-1894 for any fee that may be required to maintain the pendency of this patent application.

Drawings

The Examiner has objected to the drawings under 37 CFR 1.83(a) and 37 CFR 1.84(p)(4). Applicants have amended the drawings, as noted above starting on page 15, to include every feature of the invention specified in the claims and to correct various typographical errors. Applicants also provide new figures 1C, 5C and 5D of the drawings. No new matter has been added.

Specification

The Examiner has objected to the numbering of claims under 37 CFR 1.126. Applicants have amended the claims, as discussed above, to correct the claim numbering.

Additionally, the Examiner has objected to the disclosure, since the disclosure had a number of informalities. Applicants have amended the specification, as noted above starting on page 2, to correct the informalities noted. No new matter has been added.

35 USC §102 REJECTIONS

The Examiner rejected Claims 1 40, 46 and 48 under 35 USC 102(b) as being anticipated by Lundquist et al. (US Pat No. 6,102,886). Applicants note, however, the Examiner has also rejected Claims 2-4, 11, 15-17, 19-22, 29-31, 35, 36, 41, 42, 44, 45, 47, and 49-52, seemingly as being anticipated by Lundquist et al.

The Examiner has also rejected Claims 1, 16, 18, and 23-28 under 35 USC 102(e) as being anticipated by Swanson et al. (US Pat No. 6,514,246). It is respectfully submitted that the Examiner should withdraw these rejections.

Lundquist et al. teach a system comprising a delivery catheter having a lumen through which a stylet can be advanced. The stylet has an ablating element formed into a point at its distal end allowing the stylet to pass through a distal opening in the delivery catheter and *into* target tissue. (Emphasis added). RF energy can then be applied to the stylet to ablate the tissue surrounding the stylet. The delivery catheter can be deflected by translation of a pull wire which runs along one side of the delivery catheter, over its entire length. See generally Figs. 1, 2, 5 and 6 and corresponding text from Lundquist et al. This is different than the invention of Claim 1 of the present application.

Claim 1 requires, in part, “a tubular member...[defining] an *approach angle* with respect to a *surface* of the target tissue...at least one ablation element operably disposed at the distal portion of the tubular member...wherein the distal portion of the tubular member is configured to be deflect to a predetermine shape wherefrom a desired energy pattern is emitted, whereby at least a portion of the target tissue is ablated *substantially independent of the approach angle*.” For some ablation procedures, such as ablation of the isthmus between the inferior vena cava and the mitral valve as discussed in the present application, it is extremely difficult to direct the ablative element towards tissue to be ablated. This problem is exasperated by the fact that fluids may be present which may provide undesirable oscillatory inputs to the control system, blood pumped through the right atrium for example. With the present invention, the ablation element at the distal portion of the tubular member can approach the surface of the target tissue and ablate tissue irrespective of the orientation of

the tubular member.

There is no teaching or suggestion in Lundquist et al of having a device adapted to allow for the ablation of tissue irregardless of the approach angle, as defined in Claim 1 of the present application. Conversely, the Lundquist et al reference describes advancing an ablating element (stylet) through tissue to reach an interior of the target tissue mass. For the reasons set forth above, Applicants respectfully submit that the Claim 1 rejection based upon Lundquist et al has been overcome and Claim 1 is now in condition for allowance.

Similarly, Applicants respectfully submit that the rejection of Claim 1 based upon Swanson et al is also misplaced. Swanson et al teach a system comprising a support body and multiple electrodes. The electrodes may be configured as bipolar pairs whereby each pair can be energized separately. With regard to Figs. 16, 17 and 18, the electrode arrangements provide an "additive heating effect that causes lesions to span across electrodes that are diagonally close and/or diametrically facing." See Col. 13, lines 31-34. There is no teaching or suggestion in Swanson et al of providing a system which can ablate tissue irregardless of the approach angle with respect to the surface of the target tissue, as claimed in Claim 1 of the present application. While the devices of Swanson et al have curvilinear structures, to state that these structures provide for ablation of tissue irregardless of the approach angle with respect to the tissue surface is merely hindsight reconstruction and improper. For the reasons set forth above, Applicants respectfully submit that the Claim 1 rejection based upon Swanson et al has been overcome.

Applicants have amended Claims 29, 40, 46 and 48 in similar fashion as Claim 1 and, for the reasons set forth above, respectfully submit that the above rejections based upon Lundquist and with respect to Claims 29, 40, 46 and 48 have been overcome.

Since Claims 2-4, 11, 15-31, 35, 36, 41, 42, 44, 45, 47, and 49-52 all depend from, directly or indirectly, and further limit independent claims which Applicants believe are now in allowable form, Applicants respectfully submit that the rejection of the claims immediately above has been overcome, as well.

35 USC §103 REJECTIONS

The Examiner has rejected Claims 5-10, 12-14 and 43 under 35 USC 103(a) as being unpatentable over Lundquist et al in view of Berube et al, Claim 27 as being unpatentable over Swanson et al in view of Sharkey et al, Claims 33 and 34 as being unpatentable over Lundquist et al, and Claims 37-39 as being unpatentable over Lundquist et al in view of Pomeranz et al.

Regarding Claim 33, based upon the arguments set forth above with respect to Lundquist et al, Applicants respectfully submit that this rejection has been overcome, e.g. there is no suggestion in Lundquist et al of a method of ablating tissue irregardless of an approach angle defined by “the longitudinal axis of the tubular member immediately proximal to the distal portion thereof and a surface of the target tissue.” Since Claims 34, and 37-39 depend from and further limit Claim 33, Applicants respectfully submit that Claims 34, and 37-39 are in allowable form.


Since the remaining Claims 5-10, 12-14, 27 and 43 all depend from, directly or indirectly, and further limit independent claims which Applicants believe are now in allowable form, Applicants respectfully submit that the rejection of the claims immediately above has been overcome, as well

Applicants note that although the Examiner has not addressed the patentability of Claim 32, for the reasons set forth herein, Applicants respectfully subject that Claim 32 is in condition for allowance.

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In view of the above amendments and the discussion relating thereto, it is respectfully submitted that the instant application, as amended, is in condition for allowance. Early reconsideration and reexamination is respectfully requested.

Respectfully Submitted,

By: 
Ross M. Carothers
Reg. No. 44,593

Date: 17-Oct-2003
AFx inc.
47929 Fremont Blvd.
Fremont, CA 94538
(510) 651-7430
(510) 623-4088 (FAX)